

CLAIMS:

1. A computer program product comprising semaphore means for stalling a first task until one of a predetermined set of events occurs, characterized in that the computer program product comprises specific message files associated with said first task for receiving data to be processed by the first task, the occurrence of one of said set of predetermined events causing a piece of data to be written in one of the associated message files.

2. A computer program product as claimed in claim 1, wherein said set of predetermined events includes hardware interruptions, a hardware interruption causing a selected interruption handler to write data into one of the message files associated with the first task, a blocking mechanism being used for temporarily blocking the interruptions during said data writing into the message file.

3. A computer program product as claimed in any one of claim 1 or 2, wherein said set of predetermined events includes at least an event causing a second task to write data into one of the associated message files.

4. A computer program product as claimed in any one of claims 1 to 3, wherein said message files are given a priority level for the first task to process the data received in the associated files in the order of priority of the file in which the data are received.

5. A computer program product as claimed in claim 4, wherein the message files with the highest priority level are allocated to interruption handlers so as to receive data from said interruption handlers.

6. A computer program product as claimed in any one of claims 1 to 5, wherein said message files comprise a data structure which is accessible by pointer manipulation.

7. A computer system for implementing a computer program as claimed in any one of claims 1 to 6, wherein said system comprises:

- a processor for executing a set of schedulable tasks including at least the first task,

- a scheduler for selecting one of said schedulable tasks for execution by said processor,

5 - at least an interrupt handler for handling interrupts,
 - an interrupt server for performing a specific function in response to the occurrence of an interrupt.

8. An electronic apparatus comprising a computer system as claimed in claim 7.

10 9. A method of synchronizing a first task with respect to an occurrence of one of a predetermined set of events, the method comprising :

15 - a waiting step for making said first task wait for a specific semaphore until one of said predetermined set of events occurs, said first task being associated with message files for receiving data in a message, said data reception being caused by the occurrence of one of said predetermined events,

 - a blocking step for temporarily blocking interruptions during reception of said data,

 - a reception step for receiving said data in one of the associated message files,

20 - a wakeup step for waking up said first task upon reception of the data in one of its associated files,

 - a reading and processing step performed by said first task for reading and processing the data received in a message file.

25 10. A method as claimed in claim 9, wherein said set of predetermined events includes hardware interrupts causing interrupt handlers to write data into one of the message files associated with the first task.